

Crystal Data: Orthorhombic. *Point Group:* n.d. As fibrous crystals to 10 μm or prismatic tablets and blades to 25 μm.

Physical Properties: *Cleavage:* Excellent on {100}. *Fracture:* Conchoidal and hackly. Hardness = 2-3 D(meas.) = 6.86(5) D(calc.) = 6.87 Fluoresces red and red-orange under LW UV.

Optical Properties: Transparent. *Color:* Canary yellow; white in reflected light with abundant bright canary yellow to palest yellow-white internal reflections; blackens on exposure to sunlight. *Streak:* Canary yellow. *Luster:* Vitreous. *Optical Class:* Biaxial (+) [synthetic]. 2V = > 70° n = 2.25(1) *Pleochroism:* Weak, pale yellow to greenish yellow. *Dispersion:* r >> v. Length fast; parallel extinction. *Reflectivity:* ~15%

Cell Data: *Space Group:* Ammm, A2mm, Am2m, Amm2, or A222. a = 9.332(5) b = 16.82(2) c = 9.108(5) Z = 8

X-ray Powder Pattern: McDermitt mercury deposit, Humboldt County, Nevada, USA. 2.58 (100), 3.65 (90), 3.11 (51), 2.60 (49), 2.83 (36), 6.30 (36), 2.97 (23)

Chemistry	(1)	(2)
Hg	81.2	81.67
S	9.4	8.70
Cl	9.4	9.62
Total	100.0	99.99

(1) McDermitt mercury deposit, Humboldt County, Nevada, USA; SEM-EDS analysis; corresponds to Hg₃S_{2.17}Cl_{1.97}. (2) Hg₃S₂Cl₂.

Occurrence: Along fractures in hydrothermally altered, rhyolitic, tuffaceous lacustrine rocks in a caldera complex.

Association: Corderoite (α-Hg₃S₂Cl₂), cinnabar.

Distribution: From the McDermitt mercury deposit, ~10 km southwest of McDermitt, Humboldt County, Nevada, USA.

Name: Honors Dr. Kenneth Jinghwa Hsu (b. 1929), Professor Emeritus, Swiss Federal Institute of Technology (E.T.H.), Zurich, Switzerland, for his numerous contributions to the earth sciences.

Type Material: National Museum of Natural History (171405 and 171406), Washington, D.C., and the W.M. Keck Museum, Mackay School of Mines, University of Nevada, Reno, Nevada, USA.

References: (1) McCormack, J.K. and F.W. Dickson (1998) Kenhsuite, γ-Hg₃S₂Cl₂, A new mineral species from the McDermitt Mercury Deposit, Humboldt County, Nevada. *Can. Mineral.*, 36, 201-206.